

Pest Update (October 10-17, 2012)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent in from any location – please provide a picture!**

Available on the net at:

<http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx>

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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Current Concerns

Should I still be watering my trees and shrubs?



I have received a lot of questions on this subject during the last week and the answer is yes. Much of the state is experiencing cool to warm temperatures with little precipitation so the soils are becoming very dry. Trees, even deciduous trees that have lost their leaves, are still absorbing and transpiring water. As long as the soils are not frozen and the day temperatures are above freezing an occasional watering is beneficial. The best recommendation is to water mid-day so the water has a chance to soak in before the temperatures dip to freezing at night and only water if the air temperature is above 40 to 45°F. You do not want to create a frozen “pond” around your trees and shrubs as this can injury the lawn. You also do not need to apply as much water as you would in summer as the need is much less. Small trees and large shrubs will need about 8 to 10 gallon each watering and seedling trees and small shrubs about 2 to 5 gallons each watering. The plants should be watered about every two weeks as long as this warm, dry weather continues.

E-samples



Cottonwoods are shedding twigs along with the leaves this autumn.

This is not a fungal or bacterial infection or an insect or mite infestation but a normal process from some species including cottonwood. Cladoptosis is the shedding of branches by abscission and occurs through a well-defined abscission zone that was clearly visible at the base of the branches, almost a ball and socket arrangement. Cladoptosis occurs in response to drought stress and aging

– probably both a factor in this instance – and typically occurs in autumn through spring. It is most common on cottonwoods, poplars, and willows.



What is wrong with this tree? The needles on the newest growth were abnormal small but the previous year's needles were normal as well as the shoot extension. Spruces have preformed growth meaning the condition of one summer (when bud set occurs) determines the growth the following year. If the tree is stressed after bud set,

the normal number of needles will be produced the following spring but they will be abnormally small. The picture above is a perfect illustration of this. The tree was growing normally but was transplanted in the fall. Since the tree was water stressed the following summer the needles were abnormally small but recovered the following year.



This is an elm that was “oozing.” This is a common problem with elms and cottonwoods and is called wetwood or slime flux. It is a bacterial disease that can result in wilting leaves and dying branches but usually the oozing of a foul smelling, alcoholic (but don't drink it!) liquid is the only visible indicator of the disease. The bacteria lives in the sapwood and the fermentation activity results in the development of an alkaline liquid under pressure that is forced out of

the tree through cracks and old pruning wounds. The liquid is so alkaline that it will bleach the bark white as it runs down the tree! Once it was a common practice to place a drain tube in the tree to relieve the pressure but now it has been found that wetwood reduces decay so it may even be a benefit to the tree.

Samples received

Bon Homme County

What is the problem with this spruce? The needles are falling off the tree. The needles have some pine needle scale, is this the problem?

The pine needle scale is not helping but the population is so low – one or two on scattered needles along a branch – that it is not the primary stress. This sample did have evidence of a large mite population and I believe this is the real stress. It is too late to control for this season but the tree should be treated next spring. Check next year's *Update* for current recommendation.

Campbell County

Here are three samples, grape, Virginia creeper and arborvitae. They all have spots on the foliage and the creeper had patches that dried up by midsummer.

I doubt if the problem is related since these three species do not share any common pests. The arborvitae is probably winter-injury. Sometimes it can take part of the growing season before it shows up on the plant and Mobridge is a tough site for these shrubs to perform well. The grape and Virginia creeper are affected by a number of wilts and leaf spot diseases. If they are growing in shade or the soil is kept too moist, one of these diseases may be the problem.

Dewey County
from Timber Lake?

What is wrong with these spruce

The first problem is they are from Timber Lake – that is not ideal spruce country. The trees appear to be suffering from drought and should be receiving a slow soaking once a week in the area out from the base of at least 2/3's the height during the growing season. The trees also showed mite damage and I recommend treatment next spring – see the spring *Update* for current recommendations. I doubt if the 6-foot tree will survive the winter but the larger one may be around for treatment.

Lyman County

What is wrong with these spruce?

They are declining fast and some are already dead. I doubt they were watered and you are probably going to say its drought.

And you're right. The sample showed unusually small needles, less than ¼-inch long and the twig growth for 2012 was only ¼-inch! I believe we can blame drought for the majority of the problem.

Turner County
grown spruce?

What might be the problem with this

The sample contained the bluish-white resin blisters commonly associated with cytospora canker. This is a very common canker disease of mature (more than 20 years old) Colorado spruce and the infection will often result in the loss of the lower branches. Unfortunately the only control is to prune out infected branches as they decline.

Walworth County

What is this plant/tree?

This is the sandbar willow (*Salix exigua* subsp. *interior*). It is common along stream banks, even ones that flow only in the spring, as well as moist ditches and river sandbars. It usually forms dense thickets.

Yankton County FL1200061

What is wrong with my blue spruce?

The interior needles are turning yellow.

Nothing is wrong with this tree! The spruce is shedding its six and seven year old needles, a complete normal process in autumn. This year, due to the dry, sunny weather, the needles are turning a bright yellow before dropping so the shedding is very noticeable.